

PATENT
Docket No.: 19603/3232 (CRF D-2587B)

Applicants	:	Goldman et al.)	Examiner:
)	Q. Nguyen
Serial No.	:	09/846,588)	
Cnfrm. No.	:	4784)	Art Unit:
)	1636
Filed	:	May 1, 2001)	
For	:	METHOD OF INDUCING NEURONAL)	
		PRODUCTION IN THE BRAIN AND)	
		SPINAL CORD)	

**INFORMATION DISCLOSURE STATEMENT
UNDER 37 CFR §§ 1.97-1.98**

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Dear Sir:

Pursuant to 37 CFR §§ 1.97-1.98, applicants hereby bring to the attention of the United States Patent and Trademark Office, the enclosed references listed on the attached PTO-1449 form.

Respectfully submitted,

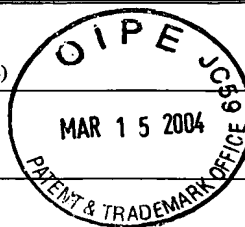
Date: March 12, 2004

Michael L. Goldman
Registration No. 30,727

Nixon Peabody LLP
Clinton Square, P.O. Box 31051
Rochester, New York 14603-1051
Telephone: (585) 263-1304
Facsimile: (585) 263-1600

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Date <u>3/12/04</u>	<u>Wendy L. Barry</u> Wendy L. Barry

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	APPLICANT Goldman et al.	
	FILING DATE May 1, 2001	GROUP ART UNIT To Be Assigned



U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPRO- PRIATE
	1	5,082,670	01/21/92	Gage et al.			
	2	5,196,315	03/23/93	Ronnett et al.			
	3	5,308,763	05/03/94	Ronnett et al.			
	4	5,491,084	02/13/96	Chalfie et al.			
	5	5,661,032	08/26/97	Miller et al.			

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANS- LATION IF APPRO- PRIATE
	6	WO 96/38541	05/12/96	PCT			

OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, Etc.)

	7	Gage et al., "Isolation, Characterization, and Use of Stem Cells From the CNS," <u>Annu. Rev. Neurosci.</u> 18:159-192 (1995)
	8	Gage et al., "Survival and Differentiation of Adult Neuronal Progenitor Cells Transplanted to the Adult Brain," <u>Proc. Natl. Acad. Sci. USA</u> 92:11879-11883 (1995)
	9	Gao et al., "Neurotrophin-4/5 (NT-4/5) and Brain-Derived Neurotrophic Factor (BDNF) Act at Later Stages of Cerebellar Granule Cell Differentiation," <u>J. Neurosci.</u> 15(4):2656-2667 (1995)
	10	Memberg et al., "Proliferation, Differentiation, and Survival of Rat Sensory Neuron Precursors <i>In Vitro</i> Require Specific Trophic Factors," <u>Mol. Cell. Neurosci.</u> 6:323-335 (1995)
	11	Hoshimaru et al., "Differentiation of the Immortalized Adult Neuronal Progenitor Cell Line HC2S2 into Neurons by Regulatable Suppression of the <i>v-myc</i> Oncogene," <u>Proc. Natl. Acad. Sci. USA</u> 93:1518-1523 (1996)
	12	Ockel et al., "In Vivo Effects of Neurotrophin-3 During Sensory Neurogenesis," <u>Development</u> 122:301-307 (1996)
	13	Gravel et al., "Adenoviral Gene Transfer of Ciliary Neurotrophic Factor and Brain-Derived Neurotrophic Factor Leads to Long-Term Survival of Axotomized Motor Neurons," <u>Nature Medicine</u> 3:765-770 (1997)
	14	Ribotta et al., "Prevention of Motoneuron Death by Adenovirus-Mediated Neurotrophic Factors," <u>J. Neurosci. Res.</u> 48:281-285 (1997)

EXAMINER	DATE CONSIDERED
EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 6 9; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

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U.S. PATENT DOCUMENTS

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	15	5,654,189	08/05/97	Lee et al.			
	16	5,750,376	05/12/98	Weiss et al.			
	17	5,753,505	05/19/98	Luskin			
	18	5,753,506	05/19/98	Johe			
	19	5,874,304	02/23/99	Zolotukhin et al.			

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRAN- SLATION IF APPRO- PRIATE
	20	WO 97/07200	02/27/1997	PCT			

OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, Etc.)

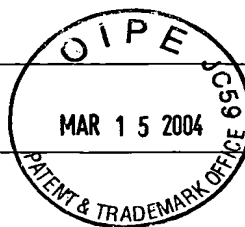
		21	DiPolo et al., "Prolonged Delivery of Brain-Derived Neurotrophic Factor by Adenovirus-Infected Müller Cells Temporarily Rescues Injured Retinal Ganglion Cells," <u>Proc. Nat'l. Acad. Sci. USA</u> 95:3978-3983 (1998)
		22	Fariñas et al., "Characterization of Neurotrophin and Trk Receptor Functions in Developing Sensory Ganglia: Direct NT-3 Activation of TrkB Neurons In Vivo," <u>Neuron</u> 21:325-334 (1998)
		23	Fukumitsu et al., "Simultaneous Expression of Brain-Derived Neurotrophic Factor and Neurotrophin-3 in Cajal-Retzius, Subplate and Ventricular Progenitor Cells During Early Development Stages of the Rat Cerebral Cortex," <u>Neurosci.</u> 84(1):115-127 (1998)
		24	Kempermann et al., "New Nerve Cells for the Adult Brain. Adult Neurogenesis and Stem Cell Concept in Neurological Research," <u>Nervenarzt</u> 69(10):851-857 (1998) (English abstract)
		25	Isenmann et al., "Excess Target-Derived Brain-Derived Neurotrophic Factor Preserves the Transient Uncrossed Retinal Projection to the Superior Colliculus," <u>Mol. Cell. Neurosci.</u> 14:52-65 (1999)
		26	Kukekov et al., "Multipotent Stem/Progenitor Cells with Similar Properties Arise from Two Neurogenic Regions of Adult Human Brain," <u>Experimental Neurology</u> 156:333-344 (1999)
		27	Takahashi et al., "Retinoic Acid and Neurotrophins Collaborate to Regulate Neurogenesis in Adult-Derived Neural Stem Cell Cultures," <u>J. Neurobiology</u> 38:65-81 (1999)
		28	Zaheer et al., "Enhanced Expression of Neurotrophic Factors by C6 Rat Glioma Cells After Transfection with Glia Maturation Factor," <u>Neuroscience Letters</u> 265:203-206 (1999)

EXAMINER

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U.S. PATENT DOCUMENTS

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	29	5,766,948	06/16/98	Gage et al.			
	30	5,770,414	06/23/98	Gage et al.			
	31	5,780,300	07/14/98	Artavanis-Tsakonas et al.			
	32	5,837,535	11/17/98	Joseph et al.			
	33	5,851,832	12/22/98	Weiss et al.			

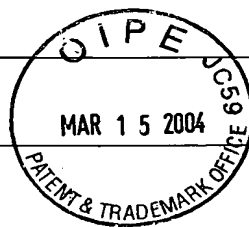
FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANS- LATION IF APPRO- PRIATE
	34	WO 98/32879	07/30/98	PCT			

OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, Etc.)

		35	Ahmed et al., "BDNF Enhances the Differentiation but Not the Survival of CNS Stem Cell-Derived Neuronal Precursors," <u>J. Neurosci.</u> 15(8):5765-5778 (1995)
		36	Alvarez-Buylla et al., "Neuronal Stem Cells in the Brain of Adult Vertebrates," <u>Stem Cells</u> 13:263-72 (1995)
		37	Bajocchi et al., "Direct In Vivo Gene Transfer to Ependymal Cells in the Central Nervous System Using Recombinant Adenovirus Vectors," <u>Nature Genetics</u> 3:229-234 (1993)
		38	Craig et al., "In Vivo Growth Factor Expansion of Endogenous Subependymal Neural Precursor Cell Populations in the Adult Mouse Brain," <u>J. Neurosci.</u> 16(8):2649-2658 (1996)
		39	Driesse et al., "Intra-CSF Administered Recombinant Adenovirus Causes an Immune Response-Mediated Toxicity," <u>Gene Therapy</u> 7:1401-1409 (2000)
		40	Goldman et al., "Neuronal Precursors of the Adult Rat Subependymal Zone Persist into Senescence, With No Decline in Spatial Extent or Response to BDNF," <u>J. Neurobiology</u> 32:554-566 (1997)
		41	Goldman et al., "Neural Precursors and Neuronal Production in the Adult Mammalian Forebrain," <u>Ann. N.Y. Acad. Sci.</u> 835: 30-55 (1997)
		42	Goldman et al., "Strategies Utilized by Migrating Neurons of the Postnatal Vertebrate Forebrain," <u>Trends in Neurosciences</u> 21(3):107-114 (1998)
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U.S. PATENT DOCUMENTS

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	43	5,958,767	09/28/99	Snyder et al.			
	44	5,968,829	10/19/99	Carpenter			
	45	5,980,885	11/09/99	Weiss et al.			
	46	6,000,772	12/14/99	Miller et al.			
	47	6,225,122	05/01/01	Sah et al.			

FOREIGN PATENT DOCUMENTS

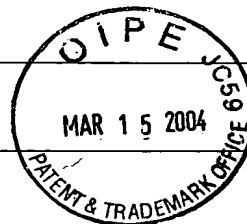
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANS- LATION IF APPRO- PRIATE
	48	WO 99/29279	06/17/99	PCT			

OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, Etc.)

		49	Goldman et al., "In Vitro Neurogenesis by Neuronal Precursor Cells Derived from the Adult Songbird Brain," <u>J. Neurosci.</u> 12(7):2532-2541 (1992)
		50	Gould et al., "Neurogenesis in the Neocortex of Adult Primates," <u>Science</u> 286:548-552 (1999)
		51	Guan et al., "Selective Neuroprotective Effects with Insulin-Like Growth Factor-1 in Phenotypic Striatal Neurons Following Ischemic Brain Injury In Fetal Sheep," <u>Neuroscience</u> 95(3):831-839 (2000)
		52	Ivkovic et al., "Expression of the Striatal DARPP-32/ARPP-21 Phenotype in GABAergic Neurons Requires Neurotrophins In Vivo and In Vitro," <u>J. Neurosci.</u> 19(13):5409-5419 (1999)
		53	Kaplan, "Proliferation of Subependymal Cells in the Adult Primate CNS: Differential Uptake of DNA-Labeled Precursors," <u>J. Hirnforsch</u> 23:23-33 (1983)
		54	Kirschenbaum et al., "Brain-derived Neurotrophic Factor Promotes the Survival of Neurons Arising From the Adult Rat Forebrain Subependymal Zone," <u>Proc. Nat'l. Acad. Sci.</u> 92:210-214 (1995)
		55	Kuhn et al., "Epidermal Growth Factor and Fibroblast Growth Factor-2 Have Different Effects on Neural Progenitors in the Adult Rat Brain," <u>J. Neurosci.</u> 17(15):5820-5829 (1997)
		56	Leventhal et al., "Endothelial Trophic Support of Neuronal Production and Recruitment from the Adult Mammalian Subependyma," <u>Molec. Cell. Neurosci.</u> 13:450-464 (1999)

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FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRAN- SLATION IF APPRO- PRIATE
	57	WO 01/46384 A2	06/28/01	PCT			

OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, Etc.)

		58	Lindsay et al., "Neurotrophic Factors: From Molecule to Man," <u>Trends in Neurosciences</u> 17(5):182-190 (1994)
		59	Lois et al., "Chain Migration of Neuronal Precursors," <u>Science</u> 271:978-981 (1996)
		60	Magavi et al., "Induction of Neurogenesis in the Neocortex of Adult Mice," <u>Nature</u> 405:951-955 (2000)
		61	Menezes et al., "The Division of Neuronal Progenitor Cells During Migration in the Neonatal Mammalian Forebrain," <u>Mol. Cell. Neurosci.</u> 6:496-508 (1995)
		62	Mizisin et al., "BDNF Attenuates Functional and Structural Disorders in Nerves of Galactose-fed Rats," <u>J. Neuropathol. & Exp. Neurol.</u> 56:1290-1301 (1997)
		63	Palmer et al., "Fibroblast Growth Factor-2 Activates a Latent Neurogenic Program in Neural Stem Cells from Diverse Regions of the Adult CNS," <u>J. Neurosci.</u> 19(19):8487-8497 (1999)
		64	Palmer et al., "FGF-2-Responsive Neuronal Progenitors Reside in Proliferative and Quiescent Regions of the Adult Rodent Brain," <u>Mol. Cell. Neurosci.</u> 6:474-486 (1995)
		65	Pencea et al., "Infusion of BDNF Into the Lateral Ventricle of the Adult Rat Leads to an Increase in the Number of Newly Generated Cells in the Fore, Mid and Hindbrain Parenchyma," <u>Soc. Neurosci.</u> 25:2045 (1999) (Abstract only)
		66	Reynolds et al., "Generation of Neurons and Astrocytes from Isolated Cells of the Adult Mammalian Central Nervous System," <u>Science</u> 255:1707-1710 (1992)
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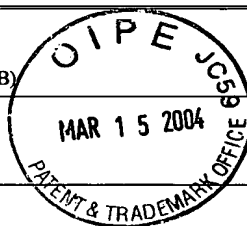
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		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRAN- SLATION IF APPRO- PRIATE

OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, Etc.)

		67	Richards et al., "De Novo Generation of Neuronal Cells from the Adult Mouse Brain," <u>Proc. Nat'l. Acad. Sci.</u> 89:8591-8595 (1992)
		68	Roy et al., "Identification, Isolation, and Promoter-Defined Separation of Mitotic Oligodendrocyte Progenitor Cells from the Adult Human Subcortical White Matter," <u>J. Neurosci.</u> 19(22):9986-9995 (1999)
		69	Roy et al., "In Vitro Neurogenesis by Progenitor Cells Isolated from the Adult Human Hippocampus," <u>Nature Medicine</u> 6(3):271-277 (2000)
		70	Vescovi et al., "bFGF Regulates the Proliferative Fate of Unipotent (Neuronal) and Bipotent (Neuronal/Astroglial) EGF-Generated CNS Progenitor Cells," <u>Neuron</u> 11:951-966 (1993)
		71	Wang et al., "Cortical Interneurons Upregulate Neurotrophins <i>In Vivo</i> in Response to Targeted Apoptotic Degeneration of Neighboring Pyramidal Neurons," <u>Exp. Neurol.</u> 154:389-402 (1998)
		72	Wang et al., "Isolation of Neuronal Precursors by Sorting Embryonic Forebrain Transfected Regulated by the T α 1 Tubulin Promoter," <u>Nat. Biotechnol.</u> 16(2):196-201 (1998)
		73	Yoon et al., "Adenovirus-Mediated Gene Delivery into Neuronal Precursors of the Adult Mouse Brain," <u>Proc. Nat'l. Acad. Sci.</u> 93:11974-11979 (1996)
		74	Zigova et al., "Intraventricular Administration of BDNF Increases the Number of Newly Generated Neurons in the Adult Olfactory Bulb," <u>Mol. Cell. Neurosci.</u> 11:234-245 (1998)
		75	McDonald et al., "A Structural Superfamily of Growth Factors Containing a Cystine Knot Motif," <u>Cell</u> 73:421-424 (1993)
EXAMINER		DATE CONSIDERED	
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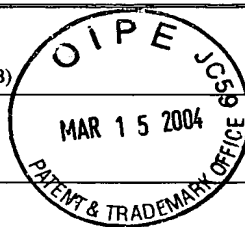
		76	Lim et al., "Noggin Antagonizes BMP Signaling to Create a Niche for Adult Neurogenesis," <u>Neuron</u> 28:713-726 (2000)
		77	Zimmerman et al., "The Spemann Organizer Signal noggin Binds and Inactivates Bone Morphogenetic Protein 4," <u>Cell</u> 86: 599-606 (1996)
		78	Gritti et al., "Multipotential Stem Cells from the Adult Mouse Brain Proliferate and Self-Renew in Response to Basic Fibroblast Growth Factor," <u>J. Neurosci.</u> 16:1091-1100 (1996)
		79	Gloster et al., "The T α 1 α -Tubulin Promoter Specifies Gene Expression as a Function of Neuronal Growth and Regeneration in Transgenic Mice," <u>J. Neurosci.</u> 14(12):7319-7330 (1994)
		80	Lothian et al., "An Evolutionarily Conserved Region in the Second Intron of the Human Nestin Gene Directs Gene Expression to CNS Progenitor Cells and to Early Neural Crest Cells," <u>Eur. J. Neurosci.</u> 9:452-462 (1997)
		81	Weiss et al., "Is There a Neural Stem Cell in the Mammalian Forebrain?," <u>TINS</u> 19:387-393 (1996)
		82	Gould et al., "Proliferation of Granule Cell Precursors in the Dentate Gyrus of Adult Monkeys is Diminished by Stress," <u>Proc. Natl. Acad. Sci. USA</u> 95:3168-3171 (1998)
		83	Eriksson et al., "Neurogenesis in the Adult Human Hippocampus," <u>Nature Medicine</u> 4:1313-1317 (1998)
		84	Pincus et al., "Neural Stem and Progenitor Cells: A Strategy for Gene Therapy and Brain Repair," <u>Neurosurgery</u> 42(4):858-867 (1998).

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OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, Etc.)

		85	Roy et al., "Promoter-Targeted Selection and Isolation of Neural Progenitor Cells From the Adult Human Ventricular Zone," <u>J. Neurosci. Res.</u> 59:321-331 (2000)
		86	Brüstle et al., "Chimeric Brains Generated by Intraventricular Transplantation of Fetal Human Brain Cells Into Embryonic Rats," <u>Nature Biotech.</u> 16:1040-1044 (1998)
		87	Flax et al., "Engraftable Human Neural Stem Cells Respond to Developmental Cues, Replace Neurons, and Express Foreign Genes," <u>Nature Biotech.</u> 16:1033-1039 (1998)
		88	Frederiksen et al., "Proliferation and Differentiation of Rat Neuroepithelial Precursor Cells In Vivo," <u>J. Neurosci.</u> 8:1144-1151 (1988)
		89	Fricker et al., "Site-Specific Migration and Neuronal Differentiation of Human Neural Progenitor Cells After Transplantation In the Adult Rat Brain," <u>J. Neurosci.</u> 19:5990-6005 (1999)
		90	Menezes et al., "Expression of Neuron-Specific Tubulin Defines a Novel Population in the Proliferative Layers of the Developing Telencephalon," <u>J. Neurosci.</u> 14:5399-5416 (1994)
		91	Miller et al., "Isotypes of α -Tubulin are Differentially Regulated During Neuronal Maturation," <u>J. Cell Biology</u> 105(No. 6, Pt. 2):3065-3073 (1987)
		92	Miller et al., "Rapid Induction of the Major Embryonic α -Tubulin mRNA, T α 1, During Nerve Regeneration in Adult Rats," <u>J. Neurosci.</u> 9:1452-1463 (1989)
		93	Morshead et al., "Neural Stem Cells in the Adult Mammalian Forebrain: A Relatively Quiescent Subpopulation of Subependymal Cells," <u>Neuron</u> 13:1071-1082 (1994)
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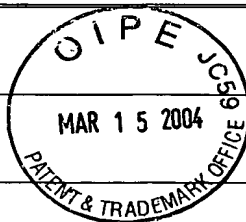
FOREIGN PATENT DOCUMENTS

DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANS- LATION IF APPRO- PRIATE

OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, Etc.)

94	Pincus et al., "Fibroblast Growth Factor-2/Brain-Derived Neurotrophic Factor-Associated Maturation of New Neurons Generated from Adult Human Subependymal Cells," <u>Ann. Neurology</u> 43:576-585 (1998)
95	Sakakibara et al., "Mouse-Musashi-1, a Neural RNA-Binding Protein Highly Enriched in the Mammalian CNS Stem Cell," <u>Dev. Biol.</u> 176:230-242 (1996)
96	Sakakibara et al., "Expression of Neural RNA-Binding Proteins in the Postnatal CNS: Implications of Their Roles in Neuronal and Glial Cell Development," <u>J. Neurosci.</u> 17(21):8300-8312 (1997).
97	Svendsen et al., "Long-Term Survival of Human Central Nervous System Progenitor Cells Transplanted into a Rat Model of Parkinson's Disease," <u>Exp. Neurol.</u> 148:135-146 (1997)
98	Uchida et al., "Direct Isolation of Human Central Nervous System Stem Cells," <u>Proc. Natl. Acad. Sci.</u> 97(26):14720-14725 (2000)
99	Vescovi et al., "Isolation and Cloning of Multipotential Stem Cells From the Embryonic Human CNS and Establishment of Transplantable Human Stem Cells Lines by Epigenetic Stimulation," <u>Exp. Neurol.</u> 156:71-83 (1999)
100	Wang et al., "Promoter-Based Isolation and Fluorescence-Activated Sorting of Mitotic Neuronal Progenitor Cells From the Adult Mammalian Ependymal/Subependymal Zone," <u>Dev. Neurosci.</u> 22:167-176 (2000)
101	Barami et al., "Hu Protein as an Early Marker of Neuronal Phenotypic Differentiation by Subependymal Zone Cells of the Adult Songbird Forebrain," <u>J. Neurobiol.</u> 28(1):82-101 (1995)
EXAMINER	
DATE CONSIDERED	
EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 6 9; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use several sheets if necessary) (PTO-1449)	ATTY. DOCKET NO. 19603/3232 (CRF D-2587B)	SERIAL NO. 09/846,588
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U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPRO- PRIATE

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANS- LATION IF APPRO- PRIATE

OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, Etc.)

		102	Rossant et al., "Expression of a Retinoic Acid Response Element-hsplacZ Transgene Defines Specific Domains of Transcriptional Activity During Mouse Embryogenesis," <u>Genes Dev.</u> 5:1333-1344 (1991)
		103	Graham et al., "Manipulation of Adenovirus Vector," <u>Methods of Molecular Biology: Gene Transfer and Expression Protocols</u> , E. Murray, ed. The Humana Press, Clifton, NJ, pp. 109-128 (1991)
		104	Anderson et al., "A Bipotential Neuroendocrine Precursor Whose Choice of Cell Fate is Determined by NGF and Glucocorticoids," <u>Cell</u> 47:1079-1090 (1986)
		105	Barres et al., "A Crucial Role for Neurotrophin-3 in Oligodendrocyte Development," <u>Nature</u> 367:371-375 (1994)
		106	Dahlstrand et al., "Characterization of the Human Nestin Gene Reveals a Close Evolutionary Relationship to Neurofilaments," <u>J. Cell Sci.</u> 103:589-597 (1992).
		107	DiCicco-Bloom et al., "NT-3 Stimulates Sympathetic Neuroblast Proliferation by Promoting Precursor Survival," <u>Neuron</u> 11:1101-1111 (1993)
		108	Goldman, "Adult Neurogenesis: From Canaries to the Clinic," <u>J. Neurobiol.</u> 36:267-286 (1998)
		109	Lu et al., "A Paradigm for Distinguishing the Roles of Mitogenesis and Trophism in Neuronal Precursor Proliferation," <u>Dev. Brain Res.</u> 94:31-36 (1996)
		110	Sieber-Blum, "Role of the Neurotrophic Factors BDNF and NGF in the Commitment of Pluripotent Neural Crest Cells," <u>Neuron</u> 6:949-955 (1991)

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 6 9; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use several sheets if necessary) (PTO-1449)	ATTY. DOCKET NO. 19603/3232 (CRF D-2587B)	SERIAL NO. 09/846,588
	APPLICANT Goldman et al.	
	FILING DATE Herewith	GROUP ART UNIT To Be Assigned

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPRO- PRIATE
	111	5,453,361	09/26/95	Yancopoulos et al.			
	112	5,830,858	11/03/98	Rosenthal			
	113	6,071,889	06/06/00	Weiss et al.			

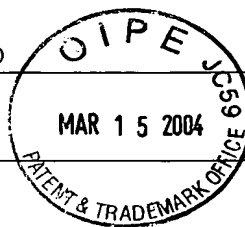
FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANS- LATION IF APPRO- PRIATE

OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, Etc.)

		114	Weiss et al., "Multipotent CNS Stem Cells are Present in the Adult Mammalian Spinal Cord and Ventricular Neuroaxis," <u>J. Neurosci.</u> 16(23):7599-7609 (1996)
		115	Pencea et al., "Infusion of Brain-Derived Neurotrophic Factor into the Lateral Ventricle of the Adult Rat Leads to New Neurons in the Parenchyma of the Striatum, Septum, Thalamus, and Hypothalamus," <u>J. of Neuroscience</u> 21(17):6706-6717 (2001)
		116	Benraiss et al., "In Vivo Transduction of the Adult Rat Ventricular Zone with an Adenoviral BDNF Vector Increases Neuronal Production and Recruitment to the Olfactory Bulb," <u>Society for Neuroscience</u> 25:1028 (1999) (abstract only)
		117	During et al., "Towards Gene Therapy for the Central Nervous System," <u>Molecular Medicine Today</u> pp. 485-493 (Nov. 1998)
		118	Shihabuddin et al., "The Search for Neural Progenitor Cells: Prospects for the Therapy of Neurodegenerative Disease," <u>Molecular Medicine Today</u> 5:474-480 (1999)
		119	Chalfie et al., "Green Fluorescent Protein as a Marker for Gene Expression," <u>Science</u> 263:802-805 (1994)
		120	Luskin et al., "Neuronal Progenitor Cells Derived from the Anterior Subventricular Zone of the Neonatal Rat Forebrain Continue to Proliferate <i>In vitro</i> and Express Neuronal Phenotype," <u>Molecular and Cellular Neuroscience</u> 8:351-366 (1997)
EXAMINER			DATE CONSIDERED
EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 6 9; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.			

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use several sheets if necessary) (PTO-1449)	ATTY. DOCKET NO. 19603/3232 (CRF D-2587B)	SERIAL NO. 09/846,588
	APPLICANT Goldman et al.	
	FILING DATE Herewith	GROUP ART UNIT To Be Assigned



U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPRO- PRIATE
	121	US 20010024827 A1	09/27/2001	Luskin			
	122	6,425,564 B1	06/12/2001	Goldman et al.			

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANS- LATION IF APPRO- PRIATE
	123	WO 01/53503 A1	07/26/2001	PCT			
	124	WO 99/49014	09/30/1999	PCT			
	125	WO 00/23571	04/27/2000	PCT			

OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, Etc.)

		126	Benraiss et al., "Adenoviral Transduction of the Ventricular Wall with a BDNF Expression Vector Induces Neuronal Recruitment from Endogenous Progenitor Cells in the Adult Forebrain," The Third Annual Meeting of the American Society of Gene Therapy, Colorado Convention Center, Denver, Colorado (May 1, 2000)
		127	Kahn et al., "Thérapie Génique des Maladies Neurologiques," <i>C.R. Soc. Biol.</i> 190:9-11 (1996)
		128	Benraiss et al., "Adenoviral Brain-Derived Neurotrophic Factor Induces Both Neostriatal and Olfactory Neuronal Recruitment From Endogenous Progenitor Cells in the Adult Forebrain," <i>The Journal of Neuroscience</i> 21(17):6718-6731 (2001)
		129	Nunes et al., "Identification and Isolation of Multipotential Neural Progenitor Cells from the Subcortical White Matter of the Adult Human Brain," <i>Nature Medicine</i> 9(4):439-447 (2003)
		130	Brüstle et al., "In vitro-Generated Neural Precursors Participate in Mammalian Brain Development," <i>Proc. Natl. Acad. Sci. USA</i> 94:14809-14814 (1997)
		131	Azizi et al., "Engraftment and Migration of Human Bone Marrow Stromal Cells Implanted in the Brains of Albino Rats-Similarities to Astrocyte Grafts," <i>Proc. Natl. Acad. Sci. USA</i> 95:3908-3913 (1998)
		132	"CytoTherapeutics' Researchers First to Directly Isolate Normal Human Neural Stem Cells," BW Health Wire News Release (Nov. 2, 1999), Reprint from Yahoo! Finance (Date Unknown)
EXAMINER			DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 6 9; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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	APPLICANT Goldman et al.	
	FILING DATE Herewith	GROUP ART UNIT To Be Assigned

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPRO- PRIATE
	133	6,245,564	06/12/2001	Goldman et al.			

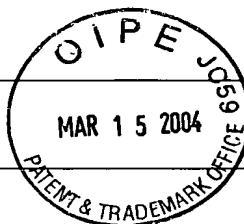
FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANS- LATION IF APPRO- PRIATE
	134	WO 94/02593	02/03/1994	PCT			

OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, Etc.)

		135	Goldman et al., "Strategies Utilized by Migrating Neurons of the Postnatal Vertebrate Forebrain," <u>Trends in Neurosci.</u> 21(3):107-114 (1998)
		136	Roy et al., "Promoter-Targeted Selection and Isolation of Neural Progenitor Cells From the Adult Human Ventricular Zone," <u>Journal of Neuroscience Research</u> 59:321-331 (2000)
		137	Bachiller et al., "The Organizer Factors Chordin and Noggin are Required for Mouse Forebrain Development," <u>Nature</u> 403:658-661 (2000)
		138	Gross et al., "Bone Morphogenetic Proteins Promote Astroglial Lineage Commitment by Mammalian Subventricular Zone Progenitor Cells," <u>Neuron</u> 17:595-606 (1996)
		139	Li et al., "Neuronal Differentiation of Precursors in the Neocortical Ventricular Zone is Triggered by BMP," <u>J. Neurosci.</u> 18:8853-8862 (1998)
		140	Li et al., "Noggin is a Negative Regulator of Neuronal Differentiation in Developing Neocortex," <u>Dev. Neurosci.</u> 22:68-73 (2000)
		141	Mehler et al., "Developmental Changes in Progenitor Cell Responsiveness to Bone Morphogenetic Proteins Differentially Modulate Progressive CNS Lineage Fate," <u>Dev. Neurosci.</u> 22:74-85 (2000)
		142	Mehler et al., "Cytokines Regulate the Cellular Phenotype of Developing Neural Lineage Species," <u>Int. J. Dev. Neurosci.</u> 13:213-240 (1995)
		143	Menezes et al., "The Division of Neuronal Progenitor Cells During Migration in the Neonatal Mammalian Forebrain," <u>Mol. Cell. Neurosci.</u> 6:496-508 (1995)
		144	Morshead et al., "Postmitotic Death is the Fate of Constitutively Proliferating Cells in the Subependymal Layer of the Adult Mouse Brain," <u>J. Neurosci.</u> 12:249-256 (1992)
EXAMINER			DATE CONSIDERED
EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 6 9; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.			

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U.S. PATENT DOCUMENTS

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FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANS- LATION IF APPRO- PRIATE

OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, Etc.)

		145	Paine-Saunders et al., "Heparan Sulfate Proteoglycans Retain Noggin at the Cell Surface: A Potential Mechanism for Shaping Bone Morphogenetic Protein Gradients," <u>J. Biol. Chem.</u> 277:2089-2096 (2002)
		146	Panchision et al., "Sequential Actions of BMP Receptors Control Neural Precursor Cell Production and Fate," <u>Genes & Dev.</u> 15:2094-2110 (2001)
		147	Pencea et al., "Infusion of Brain-Derived Neurotrophic Factor into the Lateral Ventricle of the Adult Rat Leads to New Neurons in the Parenchyma of the Striatum, Septum, Thalamus and Hypothalamus," <u>J. Neurosci.</u> 21:6706-6717 (2001)
		148	Valenzuela et al., "Identification of Mammalian Noggin and Its Expression in the Adult Nervous System," <u>J. Neurosci.</u> 15:6077-6084 (1995)
		149	Zigova et al., "Intraventricular Administration of BDNF Increases the Number of Newly Generated Neurons in the Adult Olfactory Bulb," <u>Mol. Cell. Neurosci.</u> 11:234-245 (1998)
EXAMINER			DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 6 9; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.